

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A data controller comprising:

first data control means to be connected to a host, a printer, and a scanner for controlling transfer of data between the host and the printer and transfer of data between the scanner and the host; and

second data control means for reading an original image by the scanner without an intervention of the host, converting the original image into data that can be interpreted by the printer, and transmitting the converted data to the printer,

wherein said first data control means can transfer print data from the host to the printer by a plurality of logical channels for causing the printer to execute normal print, and the printer can be caused to print the converted data transmitted by said second data control means via normal communication, thereby providing a similar copy to the original image, the plurality of logical channels and the normal communication allowing for the data controller to respond to a plurality of requests simultaneously.

2. (canceled).

3. (canceled).

4. (currently amended): A data controller to be connected to a host, a printer, and a scanner, said data controller having (i) a data flow control function for controlling transfer of data between the host and the printer and transfer of data between the scanner and the host using a plurality of logical channels, and (ii) an image data read and conversion function for reading image data by the scanner without an intervention of the host, converting the image data into data that can be interpreted by the printer, and transmitting the converted data to the printer using normal communication for printing a similar copy to an original image as a local copy, the plurality of logical channels and the normal communication allowing for the data controller to respond to a plurality of requests simultaneously,

said data controller comprising:

means for receiving a packet of the image data read from the scanner, transmitting the packet to the host, and transmitting packet data received from the host for controlling the scanner to the scanner;

status retention means for inputting and retaining a packet indicating a status of the printer from the printer;

means being responsive to an inquiry about the status of the printer from the host for receiving the packet indicating the status from said status retention means and transmitting the

packet to the host and transmitting packet data received from the host for controlling the printer to the printer; and

conversion-to-command means for converting image information input from the scanner without the intervention of the host into a command that can be interpreted by the printer.

5. (original): A data controller according to claim 4, wherein said status retention means inputs and retains the printer status from the printer periodically.

6. (original): A data controller according to claim 4, further comprising data flow regulation means for asynchronously regulating data flow between the host and the printer, data flow between the scanner and the host, and data flow between the scanner and the printer.

7. (original): A data controller according to claim 4, further comprising a local copy start switch for making it possible to manually start a local copy.

8. (original): A data controller according to claim 4, wherein said data controller is connectable to a scanner for reading a color original image and outputting YMCK binary image data.

9. (currently amended): A printer for receiving print data from a host and printing the print data and also printing an original image input through image read means contained in said printer, said printer comprising:

a data reception section;

an interpretation section that can interpret a command proper to said printer; and

an interface unit comprising: (i) data flow control means for controlling transfer of data between the host and said data reception section and transfer of data between the image read means and the host using a plurality of logical channels, and (ii) image data read and conversion means for converting image data read from the image read means without an intervention of the host into a command that can be interpreted by said interpretation section and sending the converted command to said data reception section using normal communication, the plurality of logical channels and the normal communication allowing for the printer to respond to a plurality of requests simultaneously,

wherein the print data from the host is received at said data reception section under a control of the data flow control means and is interpreted by said interpretation section, then is expanded into image data and the image data is printed, and the command converted by the image data read and conversion means is received at said data reception section and is interpreted by said interpretation section, thereby expanding into the same image data as the image data and printing the image data, whereby a copy of the original image input through the image read means can be produced.

10. (original): A printer according to claim 9, wherein at least the data flow control means transfers the data by packet communications.

11. (original): A printer according to claim 10, wherein the image data read and conversion means sends the converted command to said data reception section intact as a command proper to said printer without further converting the converted command into a packet format.

12. (currently amended): A print system comprising a plurality of logical channels, wherein data flow between at least a host computer and a printer and data flow between the host computer and a scanner are controlled separately using a plurality of said logical channels, and wherein data flow between the scanner and printer is controlled using normal communication, the plurality of logical channels and the normal communication allowing for the print system to respond to a plurality of requests simultaneously.

13. (original): A data controller to be connected to a host, a printer, and a scanner, said data controller having (i) a data flow control function for controlling transfer of data between the host and the printer and transfer of data between the scanner and the host, and (ii) an image data read and conversion function for reading image data by the scanner without an intervention of the host, converting the image data into data that can be interpreted by a first interpretation section of the printer, and transmitting the converted data to the printer for printing a similar copy to an original image as a local copy,

said data controller comprising:

a second interpretation section having an interpretation capability similar to that of the first interpretation section of the printer,

wherein, when the similar copy to the original image is printed as the local copy, said second interpretation section interprets a command issued from the host to the printer, and predetermined necessary operation is executed instead of the printer in response to an interpretation result.

14. (original) A data controller according to claim 13, wherein at least the data transfer between the host and the printer and the data transfer between the scanner and the host are executed by packet communications.

15. (original): A data controller according to claim 13, wherein if the command is determined a status request from the host as the interpretation result of said second interpretation section, the predetermined necessary operation is to read the status from the printer and transmit the read status to the host as a packet.

16. (currently amended): A data controller to be connected to a host, a printer, and a scanner, said data controller having (i) a data flow control function for controlling transfer of data between the host and the printer and transfer of data between the scanner and the host using a plurality of logical channels, and (ii) an image data read and conversion function for reading image data by the scanner without an intervention of the host, converting the image data into

data that can be interpreted by a first interpretation section of the printer, and transmitting the converted data to the printer for printing a similar copy to an original image as a local copy using normal communication, the plurality of logical channels and the normal communication allowing for the data controller to respond to a plurality of requests simultaneously,

said data controller comprising:

means for receiving a packet of the image data read from the scanner, transmitting packet data received from the host for controlling the scanner to the scanner;

a second interpretation section having an interpretation capability similar to that of the first interpretation section of the printer, when the similar copy to the original image is printed as the local copy, said second interpretation section for interpreting a command issued from the host to the printer;

status retention means for inputting and retaining a packet indicating a status of the printer if the command is determined a status request from the host as an interpretation result of said second interpretation section;

means for receiving the packet indicating the status from said status retention means and transmitting the packet to the host and transmitting packet data received from the host for controlling the printer to the printer; and

conversion-to-command means for converting image information input from the scanner without the intervention of the host into a command that can be interpreted by the first interpretation section of the printer.

17. (original): A data controller according to claim 16, further comprising data flow regulation means for monitoring packet flow between the host and the printer and packet flow between the scanner and the host and regulating the packet data flow in response to a destination of each packet.

18. (original): A data controller according to claim 16, wherein said data controller is connectable to a first scanner for reading a color original image and outputting YMCK binary image data and a second scanner for reading a color original image and outputting RGB full color image data.

19. (original): A data controller according to claim 18, further comprising color image data conversion means for receiving the RGB full color image data from the second scanner and converting the image data into the YMCK binary image data.

20. (original): A data controller according to claim 19, further comprising data flow regulation means for discriminating between the YMCK binary image data received from the first scanner and the RGB full color image data received from the second scanner, and regulating the image data flow so as to allow the image data intact to flow into said conversion-to-command means if the image data is the YMCK binary image data and allow the image data to flow into said conversion-to-command means through said color image data conversion means if the image data is the RGB full color image data.

21. (previously presented): A print system comprising data flow between a host computer and a printer, data flow between the host computer and a scanner, data flow between the printer and the scanner, each of the data flow being independently controlled, wherein at least data flow between the host computer and the printer, and data flow between the host computer and the scanner are controlled using a plurality of logical channels, the plurality of logical channels and the normal communication allowing for the print system to respond to a plurality of requests simultaneously.